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February 12, 2013

Ron Lowney WBI Energy Transmission, Inc. Fort Peck Compressor Station 2010 Montana Avenue Glendive, Montana 89330

Dear Mr. Lowney:

Montana Air Quality Permit #2803-03 is deemed final as of February 12, 2013, by the Department of Environmental Quality (Department). This permit is for a natural gas compressor station. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie Merkel

Air Permitting Supervisor Air Resources Management Bureau

Julio A Merkl

(406) 444-3626

Ed Warner

Environmental Engineer

Ed Warner

Air Resources Management Bureau

(406) 444-2467

JM:EW Enclosure Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #2803-03

WBI Energy Transmission, Inc. – Fort Peck Compressor Station 2010 Montana Avenue Glendive, Montana 59330

February 12, 2013



MONTANA AIR QUALITY PERMIT

Issued To: WBI Energy Transmission, Inc. Montana Air Quality Permit: #2803-03

2010 Montana Avenue Administrative Amendment (AA) Request

Glendive, Montana 59330 Received: 12/4/12

Department's Decision on AA: 1/25/13

Permit Final: 2/12/13 AFS #: 105-0001

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to WBI Energy Transmission, Inc. (WBI), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

WBI owns and operates a natural gas compressor station and associated equipment located in the Southwest ¹/₄ of the Southeast ¹/₄ of Section 28, Township 27 North, Range 41 East in Valley County, Montana. The mailing address of the facility is 23 MDU Road, Nashua, MT, 59248-9802. The facility is known as the Fort Peck Compressor Station.

B. Current Permit Action

On December 4, 2012, the Montana Department of Environmental Quality – Air Resources Management Bureau (Department) received correspondence from WBI as notification of a change in company name from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. The current permit action reflects this change in company name as well as updates the MAQP to reflect current Department format, rule references, and language.

Section II: Conditions and Limitations

A. Emission Limitations:

1. WBI shall only operate 3 turbocharged compressor engines at any time. Each engine shall not exceed 800 horsepower (hp) and shall be installed and operated with an automatic air to fuel ratio (AFR) controller. Emissions from each of the engines shall not exceed the following (ARM 17.8.752):

Nitrogen Oxides $(NO_X)^1$ 13.23 lb/hr Carbon Monoxide (CO) 5.29 lb/hr Volatile Organic Compounds (VOC) 2.12 lb/hr

2. Any compressor engine installed under 17.8.743 must comply with the emission limitations in Section II.A.1 (ARM 17.8.749).

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¹ NO_X reported as NO₂

3. Emissions from the 360-hp Waukesha generator engine shall not exceed the following (ARM 17.8.752):

NO_X¹ 8.73 lb/hr CO 8.73 lb/hr VOC 3.97 lb/hr

- 4. WBI shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 5. WBI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 6. WBI shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5. (ARM 17.8.752).
- 7. WBI shall operate all equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.752).

B. Testing Requirements:

- 1. The Department shall determine if initial testing is required on a compressor engine installed under ARM 17.8.743 to demonstrate compliance with the emission limitations contained in Section II.A.1 (ARM 17.8.105 and ARM 17.8.749).
- 2. WBI shall test the 360-hp Waukesha generator engine for NO_x and CO, concurrently, to demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.3 within 180 days of establishment as the permanent main electrical power supply. Testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and 17.8.749).
- 3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 4. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirement:

1. WBI shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis. For reporting purposes, the sources shall be identified using the source numbers contained in Section I.A of the Permit Analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 2. WBI shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 3. All records compiled in accordance with this permit must be maintained by WBI as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection WBI shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, auditing any monitoring equipment such as a continuous emissions monitoring system (CEMS) or continuous emission rate monitoring system (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if WBI fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving WBI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard except as specifically provided in ARM 17.8.740 *et seq*. (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the

- Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fees Pursuant to Section 75-2-220, MCA, the failure to pay the annual operation fee by WBI may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit Analysis WBI Energy Transmission, Inc. MAQP #2803-03

I. Introduction/Process Description

A. Permitted Equipment

WBI Energy Transmission, Inc. (WBI) owns and operates a natural gas compressor station that is known as the Fort Peck Compressor Station. The facility consists of 3 Superior 6GTL-825 turbocharged compressor engines (800 horsepower (hp)), a Waukesha generator engine (360 hp), a boiler (1.35 million British thermal units per hour (MMBtu/hr)), and a heater (40,000 Btu/hr).

B. Source Description

WBI's Fort Peck Compressor Station is located in the Southwest ¼ of the Southeast ¼ of Section 28, Township 27 North, Range 41 East in Valley County, Montana. The mailing address of the facility is 23 MDU Road, Nashua, MT, 59248-9802. The facility serves as a natural gas pipeline booster station. The station receives compressed gas from the Saco Compressor Station and delivers it to the Vida Compressor Station. The Saco Compressor Station and the Vida Compressor Station are also owned by WBI. The Fort Peck Compressor Station compresses approximately 20.0 - 25.0 million standard cubic feet (MMscf) per day. The facility's maximum daily compression capability is 30.0 MMscf per day.

C. Permit History

WBI's Fort Peck Compressor Station was initially constructed in 1940 by Montana Dakota Utilities Company (MDU). In 1940, two compressor engines were installed and gas compression operations commenced. From 1940 to 1947, 6 additional compressor engines were installed. Also, 9 low horsepower natural gas fueled engines that powered auxiliary equipment were operating in 1947. From 1947 to 1982, no additional emission sources were installed or constructed. In 1983, the Fort Peck Compressor Station, under the ownership of MDU, was completely renovated. During the renovation, 8 Ingersoll-Rand 8XVG natural gas compressor engines were replaced with 3 Superior 6GTL-825 turbocharged natural gas compressor engines; additionally, 9 auxiliary power engines were removed during the renovation.

The engines and appurtenant equipment, intended to replace all original natural gas compression equipment, were constructed and installed in 1983. Full time replacement engine operation began in early 1984. In the spring of 1984, all engines installed from 1940 to 1947 were retired and removed from the station property. The replacement engines and all related emission sources installed in 1983 are documented in further detail in the permit application. On April 28, 1994, Permit #2803-00 was issued and Williston Basin Interstate Pipeline Company (WBIPC) replaced MDU as the owner of the Fort Peck Compressor Station.

On February 14, 1998, WBIPC requested the Department to modify Permit #2803-00 to allow them to incorporate changes under ARM 17.8.705(q). Permit #2803-01 was issued on May 8, 1998, and allowed the swing engine methodology that WBIPC practices to ensure proper engine maintenance and operations. There were no changes expected in compression capabilities or averages as a result of the swing methodology. There were no changes expected in emissions from the facility as a result of the swing methodology. Permit #2803-01 replaced Permit #2803-00.

On April 25, 2002, the Department of Environmental Quality (Department) received a letter from WBIPC requesting to modify Permit #2803-01. In the letter, WBIPC requested to remove the every 4-year testing requirements for Units #1, #2, and #3 from Permit #2803-01 because WBIPC's operating permit (#OP2803-00) requires the units to be tested every 6 months. The current permit action removes the every 4-year testing requirements from the permit. In addition, the permit format and the permit language were updated. Permit #2803-02 replaced Permit #2803-01.

D. Current Permit Action

On December 4, 2012, the Department received correspondence from WBI as notification of a change in company name from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. The current permit action reflects this change in company name as well as updates the Montana Air Quality Permit (MAQP) to reflect current Department format, rule references, and language. MAQP #2803-03 replaces #2803-02.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department. Upon request, the Department will provide references for the location of any applicable rules or regulations or provide copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including but not limited to
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

WBI shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to the following:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 5. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 6. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 7. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 8. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 9. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

WBI must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, WBI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 - 5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. WBI will meet this limitation by burning pipeline-quality natural gas.

- 6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). WBI's Fort Peck Compressor Station is not an NSPS affected source because it does not meet the definition of a Natural Gas Processing Plant as defined in 40 CFR Part 60, Subpart KKK.
- 7. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u>

 <u>Categories</u>. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:
 - 40 CFR 63, Subpart HH-National Emission Standards for Hazardous Air a. Pollutants from Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63 shall comply with the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, a facility must either process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user (natural gas processing consists of separating certain hydrocarbons and fluids from the natural gas to produced "pipeline quality" dry natural gas). Second, the facility must also contain an affected source as specified in paragraphs (b)(1) or (b)(2) of 40 CFR 63. Subpart HH (for area sources, an affected source includes each triethylene glycol (TEG) dehydration unit). Finally, if the criteria are met and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HH. The facility can be either a major or area source of (hazardous air pollutants) HAPs. Based on information submitted to the Department, the WBI facility is not a National Emission Standards for Hazardous Air Pollutants (NESHAP) affected source because the facility is a minor source of HAPs and does not contain a TEG dehydration unit.
 - b. 40 CFR 63, Subpart HHH-National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. The WBI facility is not a NESHAP affected source because the compressor station does not have a dehydration unit (reboiler). In addition, based on information submitted to the Department, which included a complete HAP emission inventory, the compressor station does not meet the definition of a major source of HAPs as defined in 40 CFR Part 63, Subpart HHH.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee was not required for the current permit action because the permit action is considered an administrative permit change.

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2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, as described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. WBI has a PTE greater than 25 tons per year of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis</u>
 <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
 Requirements. (1) This rule requires that a permit application be submitted prior
 to installation, modification, or use of a source. A permit application was not
 required for the current permit action because the permit change is considered an
 administrative permit change. (7) This rule requires that the applicant notify the
 public by means of legal publication in a newspaper of general circulation in the
 area affected by the application for a permit. An affidavit of publication of public
 notice was not required for the current permit action because the permit change is
 considered an administrative permit change.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving WBI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.

ARM 17.8.818 Review of Major Stationary Sources and Major Modification- <u>Source Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819
 through ARM 17.8.827 shall apply to any major stationary source and any major
 modification, with respect to each pollutant subject to regulation under the Federal
 Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise
 allow.

This facility is not a major stationary source because it is not listed and does not have the potential to emit more than 250 tons per year of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) A Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. Potential to emit (PTE) > 100 tons per year of any pollutant;
 - b. PTE > 10 tons per year of any one hazardous air pollutant (HAP), PTE > 25 tons per year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. Sources with the PTE > 70 tons per year of PM₁₀ in a serious PM₁₀ nonattainment area.
 - 2. <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2803-03 for WBI, the following conclusions were made:
 - a. The facility's PTE is greater than 100 tons per year for NO_x and CO;
 - b. The facility's PTE is less than 10 tons per year of any one HAP, and less than 25 tons per year of a combination of all HAPs;
 - c. This source is not located in a serious PM_{10} nonattainment area;
 - d. This facility is not subject to a current NSPS standard;
 - e. This facility is not subject to any current NESHAP standard;
 - f. This source is not a Title IV affected source or a solid waste combustion unit; and
 - g. This source is a "major source" as designated by Title V.

Based on these conclusions, the Department determined that the Fort Peck facility is a "major source" of emissions as defined under the Title V permitting program. The Fort Peck facility's most current Title V Operating Permit (at the time of the drafting of MAQP #2803-03) was issued final and effective on June 19, 2009.

III. BACT Determination

A BACT determination is required for each new or modified source. WBI shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

IV. Emission Inventory

Tons/Year

Emission Unit	TSP	PM ₁₀	NO _x	СО	VOC	SO ₂
800-hp Superior 6GTL-825 Compressor Engine (Unit #1)	0.27	0.27	57.82	23.13	9.25	0.02
800-hp Superior 6GTL-825 compressor engine (Unit #2)	0.27	0.27	57.82	23.13	9.25	0.02
800-hp Superior 6GTL-825 compressor engine (Unit #3)	0.27	0.27	57.82	23.13	9.25	0.02
360-hp Waukesha F2895GU Generator Engine	0.14	0.14	38.16	38.16	17.34	0.01
Eclipse Plant Boiler	0.07	0.07	0.62	0.13	0.07	0.00
Hot Water Heater	0.00	0.00	0.02	0.00	0.00	0.00
Total Emissions	1.02	1.02	212.26	107.68	45.16	0.07

800 Superior 6GTL-825 Compressor Engine (Unit #1)

Brake Horsepower: 800 bhp
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001048 Scf/Btu

TSP Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 7250 Btu/hp-hr {Maximum Design}

7250 Btu/hp-hr * 0.001048 Scf/Btu * 800 hp * 8760 hr/yr = 53246784 Scf/yr

Calculations: 53246784 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.27 ton/yr

PM₁₀ Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 7250 Btu/hp-hr {Maximum Design}

7250 Btu/hp-hr * 0.001048 Scf/Btu * 800 hp * 8760 hr/yr = 53246784 Scf/yr

Calculations: 53246784 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.27 ton/yr

NOx Emissions

Emission factor: 7.50 gram/bhp-hr {Based on BACT Analysis}

Calculations: 7.50 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 13.23 lb/hr

13.23 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 57.82 ton/yr

CO Emissions

Emission factor: 3.00 gram/bhp-hr {Based on BACT Analysis}

Calculations: 3.00 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 5.29 lb/hr

5.29 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 23.13 ton/yr

VOC Emissions

Emission factor: 1.20 gram/bhp-hr {AP-42, Table 3.2-1, 10/92}

Calculations: 1.20 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 2.12 lb/hr

2.12 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 9.25 ton/yr

SO_x Emissions

Emission factor: 0.002 gram/bhp-hr {AP-42, Table 3.2-1, 9/85}

Calculations: 0.002 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 0.004 lb/hr

0.004 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

800 Superior 6GTL-825 Compressor Engine(Unit #2)

Brake Horsepower: 800 bhp
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001048 Scf/Btu

TSP Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 7250 Btu/hp-hr {Maximum Design}

7250 Btu/hp-hr * 0.001048 Scf/Btu * 800 hp * 8760 hr/yr = 53246784 Scf/yr

Calculations: 53246784 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.27 ton/yr

PM₁₀ Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 7250 Btu/hp-hr {Maximum Design}

7250 Btu/hp-hr * 0.001048 Scf/Btu * 800 hp * 8760 hr/yr = 53246784 Scf/yr

Calculations: 53246784 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.27 ton/yr

NOx Emissions

Emission factor: 7.50 gram/bhp-hr {Based on BACT Analysis}

Calculations: 7.50 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 13.23 lb/hr

13.23 lb/hr * 8760 hr/yr * 0.0005 tos/lb = 57.82 ton/yr

CO Emissions

Emission factor: 3.00 gram/bhp-hr {Based on BACT Analysis}

Calculations: 3.00 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 5.29 lb/hr

5.29 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 23.13 ton/yr

VOC Emissions

Emission factor: 1.20 gram/bhp-hr {AP-42, Table 3.2-1, 10/92}

Calculations: 1.20 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 2.12 lb/hr

2.12 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 9.25 ton/yr

SO_x Emissions

Emission factor: 0.002 gram/bhp-hr {AP-42, Table 3.2-1, 9/85}

Calculations: 0.002 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 0.004 lb/hr

0.004 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

800 Superior 6GTL-825 Compressor Engine (Unit #3)

Brake Horsepower: 800 bhp
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001048 Scf/Btu

TSP Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 7250 Btu/hp-hr {Maximum Design}

7250 Btu/hp-hr * 0.001048 Scf/Btu * 800 hp * 8760 hr/yr = 53246784 Scf/yr

Calculations: 53246784 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.27 ton/yr

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PM₁₀ Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 7250 Btu/hp-hr {Maximum Design}

7250 Btu/hp-hr * 0.001048 Scf/Btu * 800 hp * 8760 hr/yr = 53246784 Scf/yr

Calculations: 53246784 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.27 ton/yr

NOx Emissions

Emission factor: 7.50 gram/bhp-hr {Based on BACT Analysis}

Calculations: 7.50 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 13.23 lb/hr

13.23 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 57.82 ton/yr

CO Emissions

Emission factor: 3.00 gram/bhp-hr {Based on BACT Analysis}

Calculations: 3.00 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 5.29 lb/hr

5.29 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 23.13 ton/yr

VOC Emissions

Emission factor: 1.20 gram/bhp-hr {AP-42, Table 3.2-1, 10/92}

Calculations: 1.20 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 2.12 lb/hr

2.12 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 9.25 ton/yr

SOx Emissions

Emission factor: 0.002 gram/bhp-hr {AP-42, Table 3.2-1, 9/85}

Calculations: 0.002 gram/bhp-hr * 800 bhp * 0.002205 lb/gram = 0.004 lb/hr

0.004 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

360 Waukesha F2895GU Generator Engine

Brake Horsepower: 360 bhp
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001048 Scf/Btu

TSP Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 8200 Btu/hp-hr {Maximum Design}

8200 Btu/hp-hr * 0.001048 Scf/Btu * 360 hp * 8760 hr/yr = 27100777 Scf/yr

Calculations: $27100777 \ Scf/yr*10 \ lb/MMScf*0.0005 \ ton/lb=0.14 \ ton/yr$

PM₁₀ Emissions

Emission Factor: 10 lb/MMScf {2-02-002-02, AFSSCC page 32}

Control Efficiency: 0.0%

Fuel Consumption: 8200 Btu/hp-hr {Maximum Design}

8200 Btu/hp-hr * 0.001048 Scf/Btu * 360 hp * 8760 hr/yr = 27100777 Scf/yr

Calculations: 27100777 Scf/yr * 10 lb/MMScf * 0.0005 ton/lb = 0.14 ton/yr

NOx Emissions

Emission factor: 11.00 gram/bhp-hr {Based on BACT Analysis} Calculations: 11.00 gram/bhp-hr * 360 bhp * 0.002205 lb/gram = 8.73 lb/hr

8.73 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 38.16 ton/yr

CO Emissions

Emission factor: 11.00 gram/bhp-hr {Based on BACT Analysis} Calculations: 11.00 grams/bhp-hr * 360 bhp * 0.002205 lb/gram = 8.73 lb/hr

8.73 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 38.16 ton/yr

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VOC Emissions

Emission factor: 5.00 gram/bhp-hr {Based on BACT Analysis}

Calculations: 5.00 gram/bhp-hr * 360 bhp * 0.002205 lb/gram = 3.97 ls/hr

3.97 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 17.34 ton/yr

SO_x Emissions

Emission factor: 0.002 gram/bhp-hr {AP-42, Table 3.2-1, 9/85}

Calculations: 0.002 gram/bhp-hr * 360 bhp * 0.002205 lb/gram = 0.002 lb/hr

0.002 lb/hr * 8760 hr/yr * 0.0005 tos/lb = 0.01 ton/yr

Eclipse Plant Boiler

Max. Fuel Comb. Rate: 1.35 MMBtu/hr Hours of Operation: 8760 hrs/yr Fuel Heating Value: 0.001048 Scf/Btu

Fuel Consumption: 1.35 MMBtu/hr * 8760 hr/yr * 0.001048 Scf/Btu = 12.40 MMScf/yr

TSP Emissions

Emission Factor: 12.0 lb/MMScf {AP-42, 1.4-1, 10/92}

Calculations: 12.0 lb/MMScf * 12.40 MMScf/yr * 0.0005 ton/lb = 0.07 ton/yr

PM₁₀ Emissions

Emission Factor: 12.0 lb/MMScf {AP-42, 1.4-1, 10/92}

Calculations: 12.0 lb/MMScf * 12.40 MMScf/yr * 0.0005 ton/lb = 0.07 ton/yr

NO_x Emissions

Emission Factor: 100 lb/MMScf {AP-42, 1.4-2, 10/92}

Calculations: 100 lb/MMScf * 12.40 MMScf/yr * 0.0005 ton/lb = 0.62 ton/yr

CO Emissions

Emission Factor: 21 lb/MMScf {AP-42, 1.4-2, 10/92}

Calculations: 21 lb/MMScf * 12.40 MMScf/yr * 0.0005 ton/lb = 0.13 ton/yr

VOC Emissions

Emission Factor: 11.0 lb/MMScf {AP-42, 1.4-3, 10/92}

Calculations: 11 lb/MMScf * 12.40 MMScf/yr * 0.0005 ton/lb = 0.07 ton/yr

SOx Emissions

Emission Factor: 0.6 lb/MMScf {AP-42, 1.4-3, 10/92}

Calculations: 0.6 lb/MMScf * 12.40 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

Hot Water Heater

Max. Fuel Comb. Rate: 40,000 Btu/hr
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001048 Scf/Btu

Fuel Consumption: 40,000 Btu/hr * 8760 hr/yr * 0.001048 Scf/Btu = 0.37 MMScf/yr

TSP Emissions

Emission Factor: 12.0 lb/MMScf {AP-42, 1.4-1, 10/92}

Calculations: 12.0 lb/MMScf * 0.37 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

 $\underline{PM_{10}}$ Emissions

Emission Factor: 12.0 lb/MMScf {AP-42, 1.4-1, 10/92}

Calculations: 12.0 lb/MMScf * 0.37 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

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NO_x Emissions

Emission Factor: 100.0 lb/MMScf {AP-42, 1.4-2, 10/92}

Calculations: 100.0 lb/MMScf * 0.37 MMScf/yr * 0.0005 ton/lb = 0.02 ton/yr

CO Emissions

Emission Factor: 20.0 lb/MMScf {AP-42, 1.4-2, 10/92}

Calculations: 20.0 lb/MMScf * 0.37 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

VOC Emissions

Emission Factor: 5.30 lb/MMScf {AP-42, 1.4-3, 10/92}

Calculations: 5.30 lb/MMScf * 0.37 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

SO_x Emissions

Emission Factor: 0.60 lb/MMScf {AP-42, 1.4-2, 10/92}

Calculations: 0.60 lb/MMScf * 0.37 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

V. Existing Air Quality

The existing air quality in the proposed area of operation is unclassified or attainment for all national and Montana ambient air quality standards.

VI. Air Quality Impacts

The current permit action is an administrative permitting action with no associated increase in potential emissions. Therefore, there are no air quality impacts expected.

VII. Ambient Air Impact Analysis

The current permit action is an administrative permitting action with no associated increase in potential emissions. Therefore, the Department did not conduct an ambient air impact analysis. MAQP #2803-03 has limits and conditions that are designed to be protective of all ambient air quality standards.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation
		affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private
		property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude
		others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an
		easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and
		legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use
		of the property?

YES	NO	
	X	6. Does the action have a severe impact on the value of the property? (consider economic
		impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect
		to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the
		physical taking of adjacent property or property across a public way from the property in
		question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is
		checked in response to question 1 and also to any one or more of the following questions:
		2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded
		areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

The current permit action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared by: Ed Warner Date: 1/2/13